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ABSTRACT

Eighty-four elementary school children participated in a two-part experiment replicating an earlier experiment that tested the hypothesis that children would offer semantic explanations for words presented orally more frequently than for words presented in written form. This experiment used subjects from a population different in socioeconomic characteristics, in achievement and ability levels, and in the way they were instructed from those in the earlier experiment. In the first stage, subjects were asked to look at word lists and rate 18 words as known and 18 as unknown in oral form and a second set of 18 known and 18 unknown words in written form. In the second stage, children were asked to explain how two words (presented in one of four configurations: both known, both unknown, the question word known and the choice word unknown, and the choice word known and the question word unknown) went together. It was found that children gave more semantic responses if either the question word or the choice word were known or if the word were in the oral rather than the written mode. The word in the oral mode seemed to have more stability for the upper middle-class children of this experiment than it seemed to have for the lower middle-class rural children of the earlier experiment. (TJ)

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# Semantic Salience in Relation to Word Knownness

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# Semantic Salience in Relation to Word Knownness

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Parents, teachers, and researchers are concerned about the knowledge that children bring to school with them and about how schooling affects that knowledge. Much of this knowledge can be called metalinguistic in nature. What concepts about linguistic units do children bring to school? What kinds of notions do children have about words, about letters, about sounds, about stories and how do these notions affect their success in school? These kinds of questions have been concerning a number of reading researchers in recent years, particularly about the metalinguistic concept "word" (Downing & Oliver, 1974; Ehri, 1975, 1976, 1977; Holden & MacGinitie, 1971; Mickish, 1974; Karpova, 1955; Papandropoulou & Sinclair, 1974; Stein, 1978; Sulzby, 1978; and Tovey, 1976).

Another concern has developed in recent years that pertains to methodological issues. Researchers interested in developmental trends and how these trends are affected by schooling have been

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directing attention to the stimulus materials used with children. A number of researchers (Brown, 1975; Hall & Ware, 1968; Perfetti & Hogaboam, 1975; Richmond, Nida, & Pittman, 1976; Stein & Goldman, 1978; and Sulzby (Tucker) 1978) have used or suggested various means to be certain that the stimulus materials used are equated on variables relevant to the children in the experiment. In Sulzby (1978) children were asked to rate words used in the study as either Known or Unknown so that the variable of Knownness, as judged by the ability to identify the word and give a gist of meaning for the word, could be manipulated in an investigation of children's concept of "word."

The study reported here investigated further how the meta-linguistic unit "word" becomes primarily a semantic unit to school children, rather than primarily a unit of letters and/or sounds. Sulzby (1978) used a Word Choice paradigm in which children were asked to explain how words previously rated as known or unknown "go together for you" given that the words were presented in oral form or in written form. In other words, she investigated how two particular variables affect children's developing concept for words. Those two variables are presentation mode, written or oral, and Knownness (which was actually split into two variables for analysis of potentially different effects of the choice word or the question word given to the child).

A caution must be given about the nature of the children's explanations for their Word Choice selections which was the dependent

variable. It was first thought that the shift of salience from structural (sounds and/or letters, often called phonological or acoustic) to semantic explanations should be explored. Previous research (for example, Bach & Underwood, 1970; and Hall & Halperin, 1971), pilot studies (Tucker(Sulzby) 1978), and content analysis using the current paradigm (Sulzby 1978) indicate that children's classifiable answers are either structural or semantic. Nevertheless, the nature of the built-in relationships and the potential of the language for these two types of responses cannot justify the claim that the so-called structural to semantic shift has been explored directly. Rather, the focus in this study is upon the increasing tendency to give semantic responses, even for unknown words, when other responses (structural responses) are available and, seemingly, easier.

The increasing tendency to give semantic responses even to unknown words when the child must actually invent a potential or hypothetical meaning would have great utility for a maturing reader who wishes to read rapidly and not spend time ascertaining the "correct" meaning for every word in text. This tendency probably underlies the strategy that we call "use of the context." The current study addresses the issue of whether this tendency increases equally in written language and in oral language.

In Sulzby (1978) words were rated only in the written presentation mode and it was assumed that children would know the word in its oral form. Results of the previous study and

results reported herein indicated that this assumption is at least questionable for some populations. Generally, for younger children at least, it is assumed that oral vocabulary develops in advance of written vocabulary. Thus it was reasoned that children would offer semantic explanations for words presented orally more frequently than for words presented in written form. In the earlier study, this assumption was substantiated by significant main effects for presentation mode but questioned by significant interactions with grade in which the older children offered semantic explanations for words presented in written form as frequently as for words presented in oral form. The present study replicated the earlier study with a sample from a potentially different population, upper middle-class suburban children. It extended the earlier study by using the Knownness Rating in the oral mode in addition to the written mode.

Besides the three within subjects variables of presentation mode, knownness of the question word, and knownness of the choice word, the present study manipulated grade level, but this time from a sample from a population different in socioeconomic characteristics, in achievement and ability levels and in method of instruction.

## Method

### Subjects

Twenty-eight white upper middle-class children each from grades one, three, and five were chosen at random from an elementary

school in a suburban school district north of Chicago, Illinois. In this school system the method of teaching reading stressed decoding, but not to the exclusion of other methods. Achievement and ability scores in the school and district averaged above national norms.

Procedures and Design

Each child took part in two tasks: A Knownness Rating in which his or her words were selected and a Word Choice task in which the child explained how chosen words were together for him or her. The words for the Knownness Rating came from word lists of nouns chosen at random from four sources: Harris & Jacobson core words for first grade (Harris & Jacobson, 1973); Clarence R. Stone's revision of the Dale list of 769 easy words (Spache, 1968); The teacher's word book of 30,000 words (Thorndike & Lorge, 1944); and preprimers used in the school district. The American heritage dictionary of the English language (1975) was used to determine that the most common usage of the randomly selected word was noun. Words were arranged in lists according to frequency of occurrence to aid the children in selection. Two lists had been composed at each level for Sulzby (1978); one was used for oral and the second for written Knownness Ratings, and, hence, for the Word Choice tasks. From the lists each child rated 18 words as Known and 18 words as Unknown to him/her in oral form and a second set of 18 Known and 18 Unknown words in written form. The children needed lists 2-4

levels less frequent (hence, more difficult) for the oral rating than for the written rating. The Knownness Ratings were conducted a day prior to the Word Choice task, which was the actual experimental task from which the dependent measure was taken.

In the Knownness Rating examiners scored a word Known (K) if the child pronounced the word correctly (within the child's speech patterns) and if the child gave a gist of meaning for it appropriate to the community. The 72 words from the Knownness Rating were cast into four knownness configurations for the Word Choice task. The four knownness configurations were used to study the effects of the child's knowing all of the words (K-KK); knowing none of the words (U-UU); knowing either his/her word, the question word (K-UU); or knowing only the examiner's words, the choice words (U-KK), in an X:XA, XB choice paradigm. The four knownness configurations (K-KK, K-UU, U-KK, U-UU) and the two presentation modes (written and oral) were counterbalanced and assigned to subjects at random in the Word Choice task.

The dependent measure was the number of semantic explanations of choices in the Word Choice task. Children were asked to explain: "How does your word [the question word] go with my word [the choice word] for you?" Prior to the experimental task, the examiner used a sample triad, eliciting or modelling answers that were both semantic and structural in nature, high level as well as trivial.

Responses and probes were recorded on individual protocols. Content analysis and inner-rater reliabilities indicated that the intention of the responses could be reliably scored. Two independent raters scored each protocol. Although Pearson Product-Moment Correlations indicated a high degree of agreement initially, disagreements were resolved by a third rater.

Independent variables were grade level, knownness of the question word, knownness of the choice word, and mode of presentation. Protocols were used for descriptive analysis of metalanguage, as well as for the statistical analysis. Results of the statistical analysis will be presented here; results of the descriptive analysis will be presented in combination with those of Sulzby (1978) in a longer forthcoming report.

## Results

In a four-way repeated measures analysis of variance, children were found to give significantly more semantic responses if either the question word, $F(1,81)=95.37$, $p<.001$, or the choice word, $F(1,81)=51.96$, $p<.001$, were known or if the word were in the oral rather than the written mode, $F(1,81)=20.11$, $p<.001$. Contrary to the results of Sulzby (1978), the main effect for grade level was also significant, $F(2,81)=7.83$, $p<.001$. No interactions were significant and a visual inspection of the means showed a steady increase with grade level for all comparisons with a clear distinction between oral and written modes, with

oral means consistently higher than written means. Means also consistently increased according to the knownness conditions within the configurations.

## Discussion

In the present study, the oral mode continued to elicit more semantic responses than the written mode even in the fifth grade. The statistical analysis and the descriptive protocol analyses indicate that the word in oral presentation mode seemed to have more stability for the upper middle-class children than it seemed to have for the rural lower and lower middle-class children.

Knownness of both the Question and the Choice word continued to affect children's semantic responding significantly; children gave more semantic responses if they knew the word than if they did not. There was a steady increase in responding semantically even for all unknown words (U-UU) and for the configurations in which one or two words were unknown (K-UU and U-KK).

It is the increase in expecting even unknown words to require semantic responses that is of interest in both studies. Even when a structural response could be given or when children could refuse to respond, children showed an increasing preference to give a semantic explanation and created hypothetical meanings and contexts for unknown words. This was in line with Sulzby (1978).

It was speculated that the ability to invent a potential or hypothetical meaning would have utility for a maturing reader who wishes to read rapidly without stopping to check for precise "meanings" of unknown words. The children in this study used the same strategy to a similar degree for unknown words in oral language.

The results from Sulzby (1978) cannot be interpreted unambiguously because the words were rated only in the written mode. From the indirect evidence of the study and from the proportionate fall in ability and achievement scores, it appears that the population characteristics sampled from in Virginia and in Illinois differ in relation to the developing concept that the word is primarily a semantic unit.

Descriptive analyses should cast further light on these speculations. Those analyses will be presented in a longer report which is forthcoming.

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